The benefits of routine data collection in community health work

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Overview

Research Question	**In the context of community health worker programmes, should practicing CHWs collect, collate, and use health data versus not?**
Method	A Systematic Review (of studies using any study design)
Commissioned by	The World Health Organization
Purpose	Guideline Development: ***Health policy and system support to optimise community health worker programmes***
Context	Collection of 15 CHW programme SRs
Partner Organisations	University of Melbourne (Prof Aron Shlonsky); Newcastle (A/P Luke Wolfenden); Sydney (Katie Conte); Adelaide (Dr Zohra Lassi); Toronto (Prof Peter Newman); Aga Khan University (Dr Jai K. Das)

Scope 1: CHWs

- ➢ carry out population-based, health-related activities in their community
- ➢ in a community they are directly connected to (they live in the community; are accountable to the community)
- ➢ have received no or only basic formal training; this training may be recognised by health services or a certification authority, but it is not a part of a formal tertiary education programme or qualification (e.g., degree, diploma, title, certificate course).

- ➢ work in high, low and middle income settings
- ➢ work in underserved community setting
- ➢ work in general population settings

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Scope 2: Data Collection

INCLUDED	EXCLUDED
➢ Data collection that is part of CHWs work routines • regular data collection, • regular data use • written, oral or electronic data reporting to peers, supervisors or others	➢ Data collection that is part of research external to the routine activities of CHWs (e.g. led by research institutions that involve CHWs in data collection for research)
	➢ Data collection for purposes not related to the supervision / coaching of CHWs – e.g. studies assessing the quality of data collected by CHW for surveillance purposes

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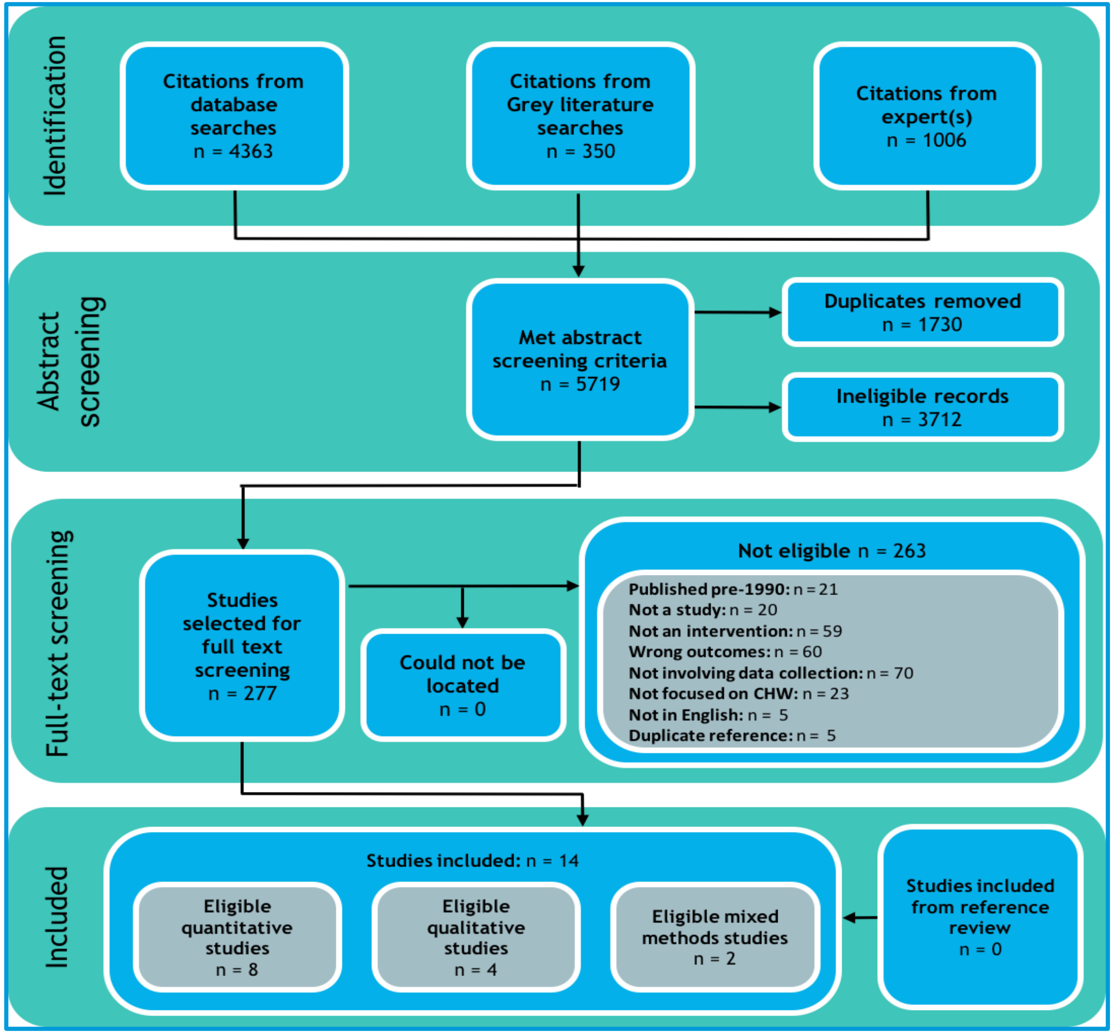
Findings 1

N = 14

- 8 quant (3 RCTs)
- 4 qual
- 2 mm



Identification

Citations from database searches n = 4363

Citations from Grey literature searches n = 350

Citations from expert(s) n = 1006

Abstract screening

Met abstract screening criteria n = 5719

Duplicates removed n = 1730

Ineligible records n = 3712

Full-text screening

Studies selected for full text screening n = 277

Could not be located n = 0

Not eligible n = 263

Published pre-1990: n = 21
Not a study: n = 20
Not an intervention: n = 59
Wrong outcomes: n = 60
Not involving data collection: n = 70
Not focused on CHW: n = 23
Not in English: n = 5
Duplicate reference: n = 5

Included

Studies included: n = 14

Eligible quantitative studies n = 8

Eligible qualitative studies n = 4

Eligible mixed methods studies n = 2

Studies included from reference review n = 0

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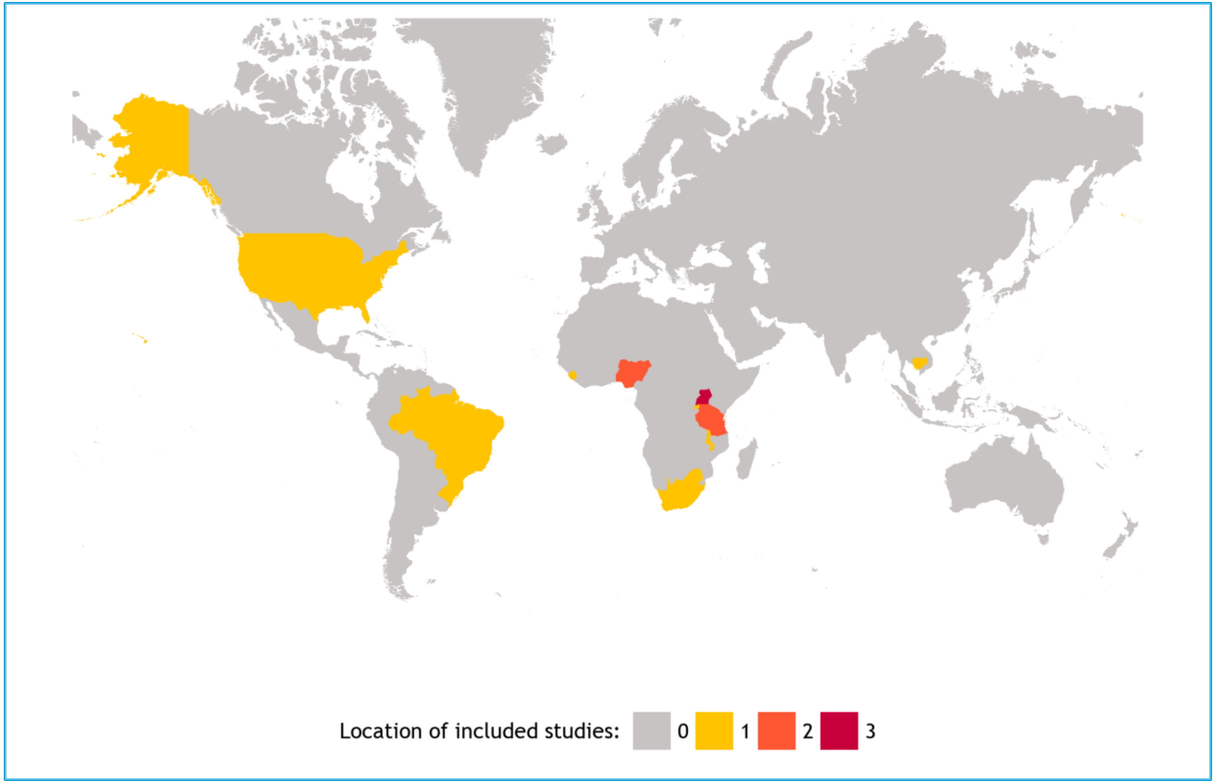
Findings 2

Geography

- African Region N=11
- Region of the Americas N=2

Diseases

- MCH
- Infectious
- Non-communicable



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Findings 3

- Findings associated with data collection processes most often **outputs**:
  - *INDIRECT* = CHW motivation; satisfaction; knowledge; self-efficacy/esteem;
  - *DIRECT* = CHW absenteeism; service delivery (quantity / quality); changes in health system functioning; productivity
  - *DEVELOPMENTAL* = CHW attrition
- Only small indications of changes in **outcome**
  - Changes in health system functioning; community health (*CREDIBILITY*)
- Smallest indications that data collection may create **impact** (mortality, morbidity)
- Strong and enthusiastic presence of *mHealth* applications
- Little information on how data collection processes were integrated into supervision, coaching etc aimed at supporting CHWs

Conclusion

- Weak evidence base – need to expand and strengthen it
- Data collection – changes in outcomes: Thus far, an association only
- Applicability of findings in other contexts may be limited
  - *Majority of studies conducted in Africa*
  - *CMH / infectious diseases focus - non-communicable diseases, mental and behavioural disorders lacking*
- Great hopes for mHealth – which needs to be examined further

References

- **Cometto, G.**, Ford, N., Pfaffman-Zambruni, J., Akl, E., Lehmann, U., McPake, B., et al. (2018). Health policy and system support to optimise community health worker programmes: an abridged WHO guideline, *Lancet Global Health*, 1–8. http://doi.org/10.1016/[PII (*accessible from Oct. 26, 2018*)
- **Naimoli, J. F.**, Frymus, D. E., Wuliji, T., Franco, L. M., & Newsome, M. H. (2014). A Community Health Worker "logic model": towards a theory of enhanced performance in low- and middle-income countries. *Human Resources for Health*, *12*(56), 1–16.
- **Scott, K.**, Beckham, S. W., Gross, M., Pariyo, G., Rao, K. D., Cometto, G., & Perry, H. B. (2018). What do we know about community-based health worker programs? A systematic review of existing reviews on community health workers. *Human Resources for Health*, *16*(1), 1–17. http://doi.org/10.1186/s12960-018-0304-x

Thank you

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